

Chapter 4, lesson 39, Making a base

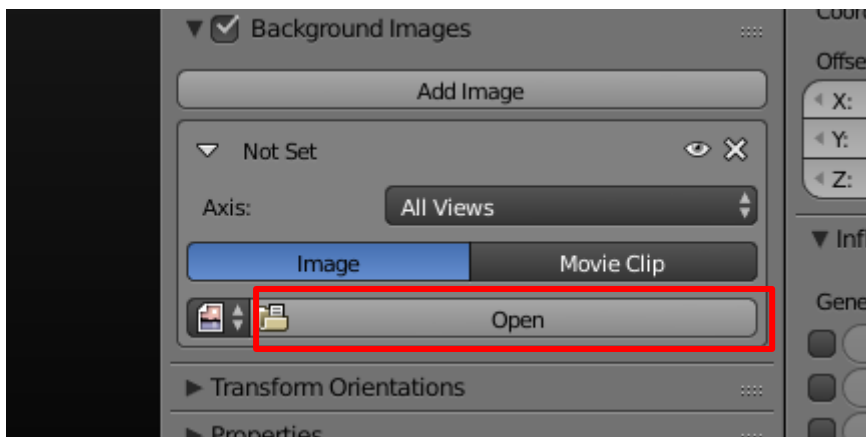
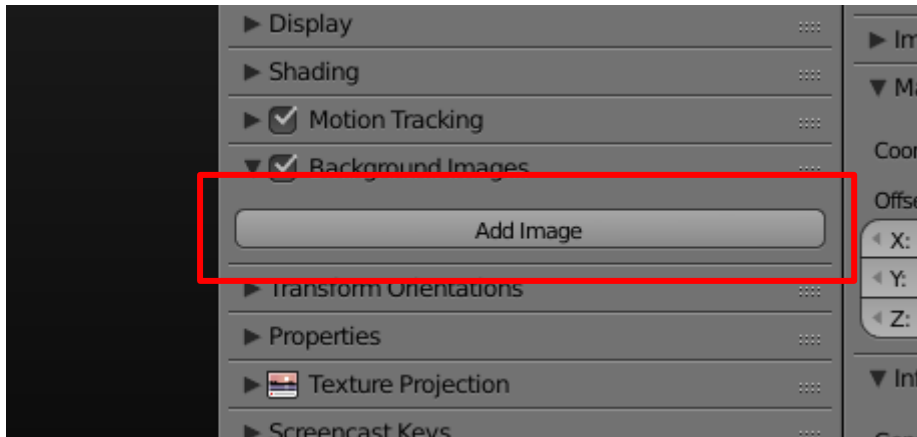
In this lesson we will consider the following topics.

- Importing reference
- Navigating the viewport using the numpad
- Learn how to create a base for our building using basic modelling and selection tools
- Using different selection modes for vertices and faces

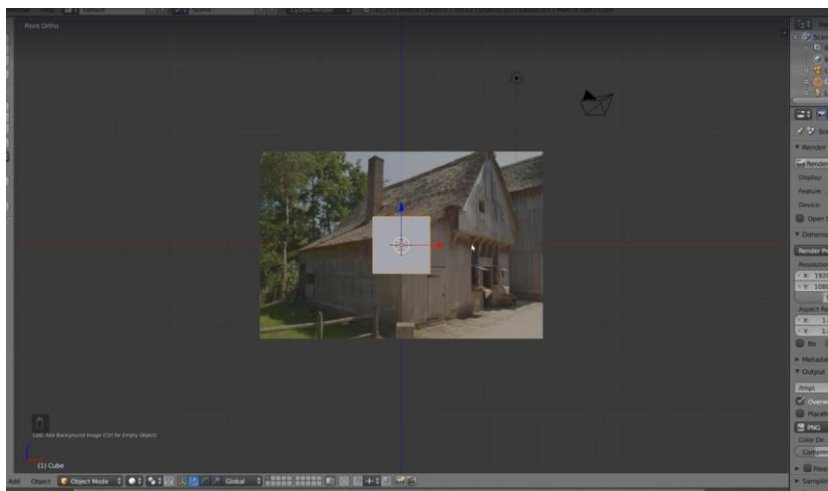
Chapter 4, lesson 39, Making a base

Make sure to download all the assets for chapter 4 to follow along.

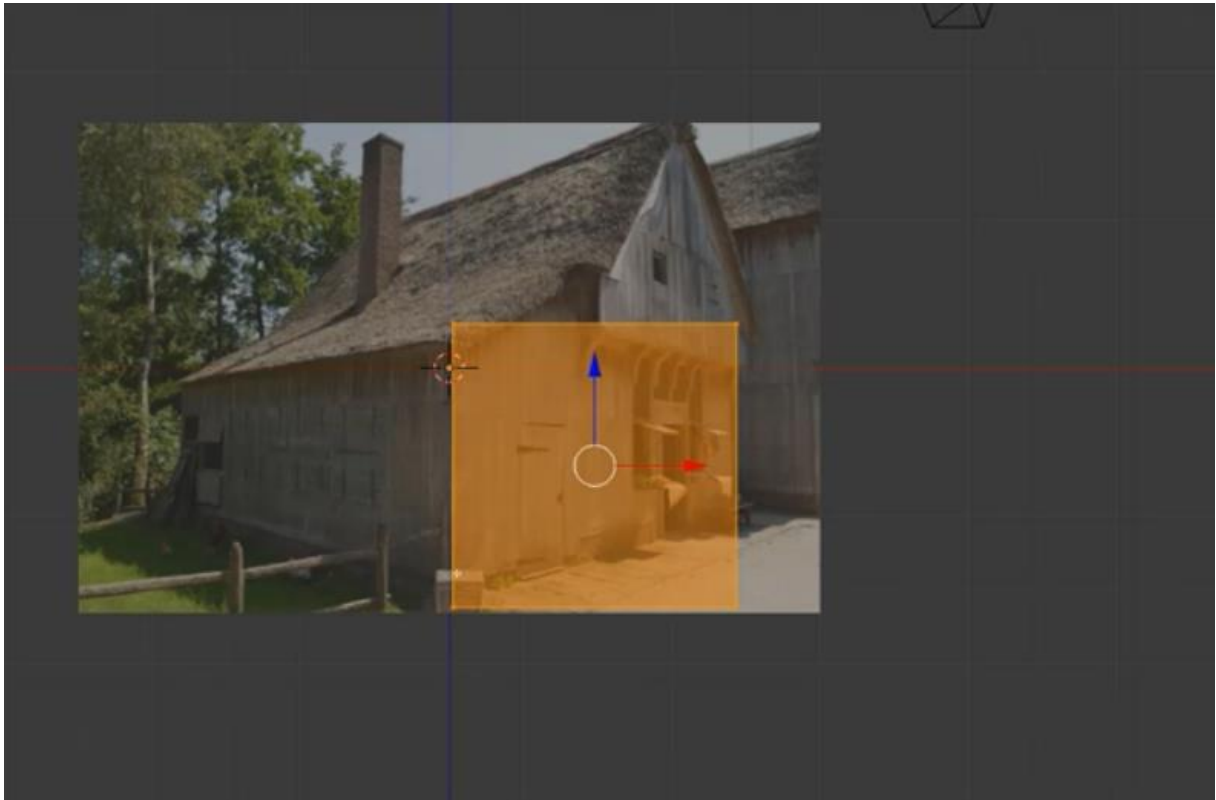
Press n to open the “properties region”-panel, go to the background section and select add image and then “open”. Browse to the background image that you want. In the course it is called DSC_0334.jpg. There is no blueprint available. Only reference for this part of the course.



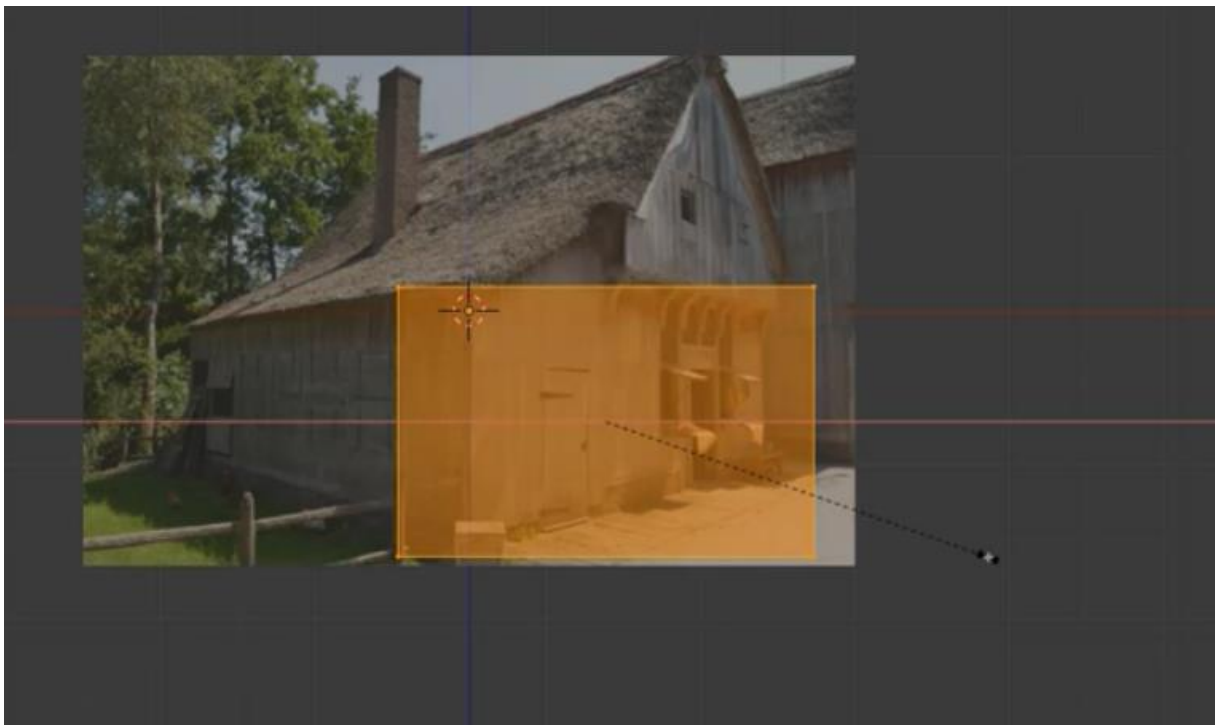
Press “1” and “5” on the numpad to get into front orthographic view.



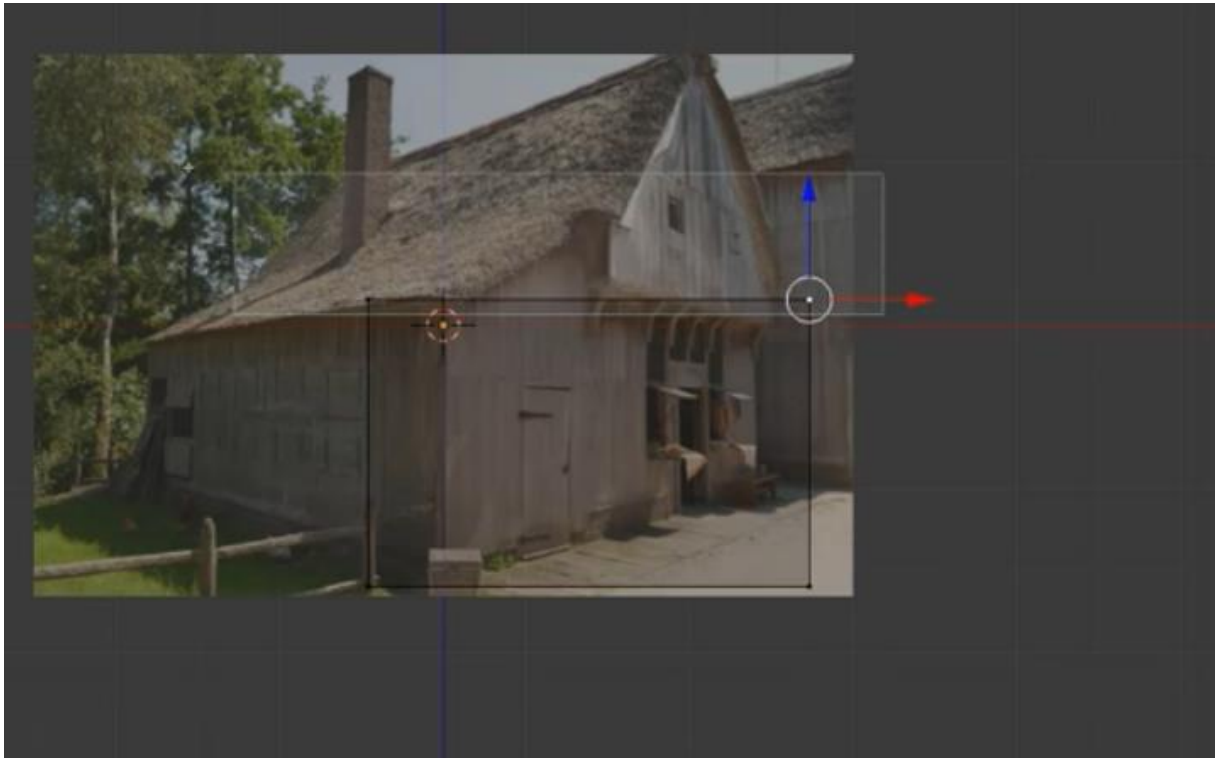
Go to edit mode with **tab**, press **Z** for wireframe and move the cube by tapping **G** and moving the mouse



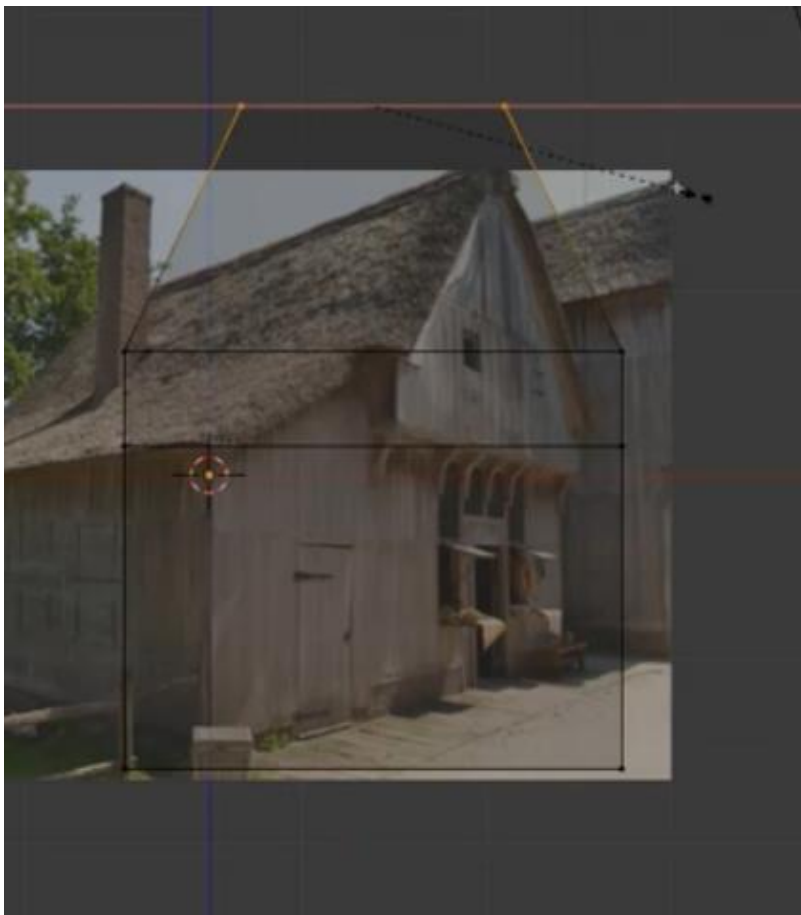
Scale the cube with **S** followed by **x**, **y** or **z** for a given axis or **S** followed by **shift + x**, **shift + y** or **shift + z** to constrain the scaling from scaling in the given axis.



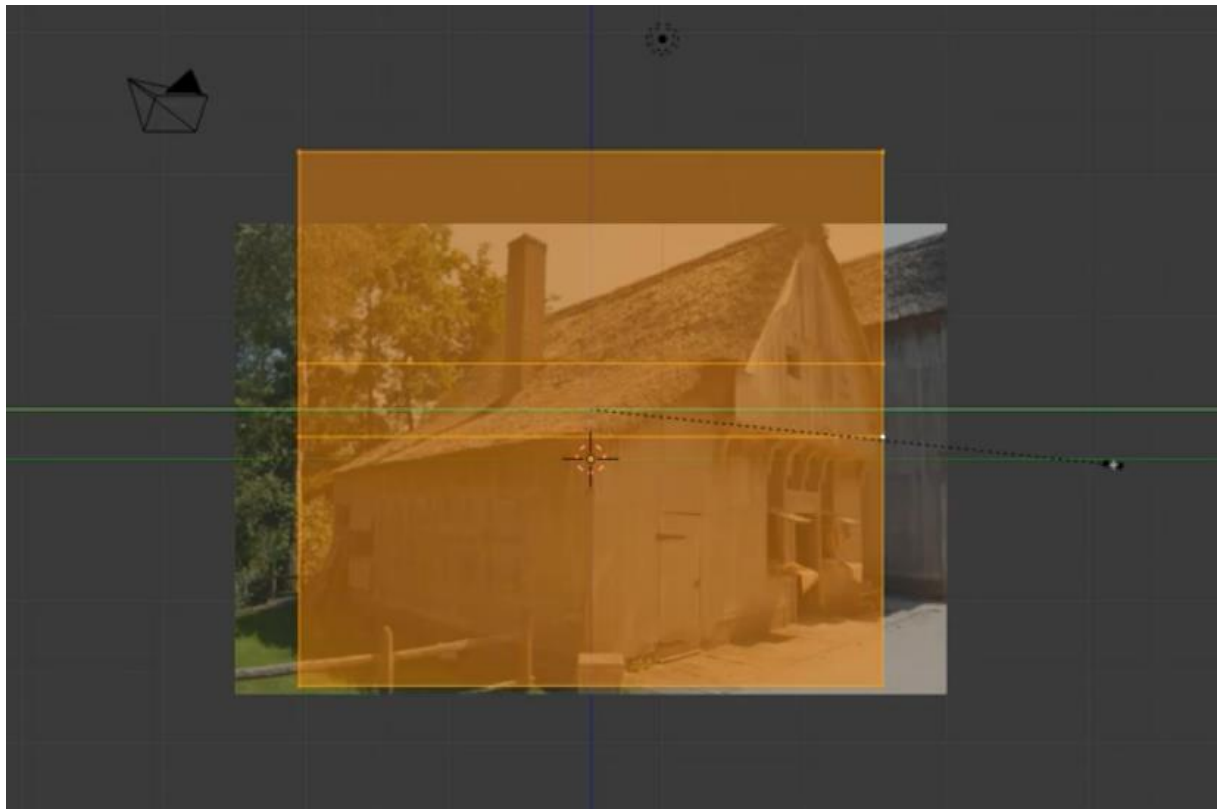
Select the top two vertices in wireframe mode with box select, hotkey **B** will select the top face. Hit **E** after selecting to extrude it making new geometry for the roof.



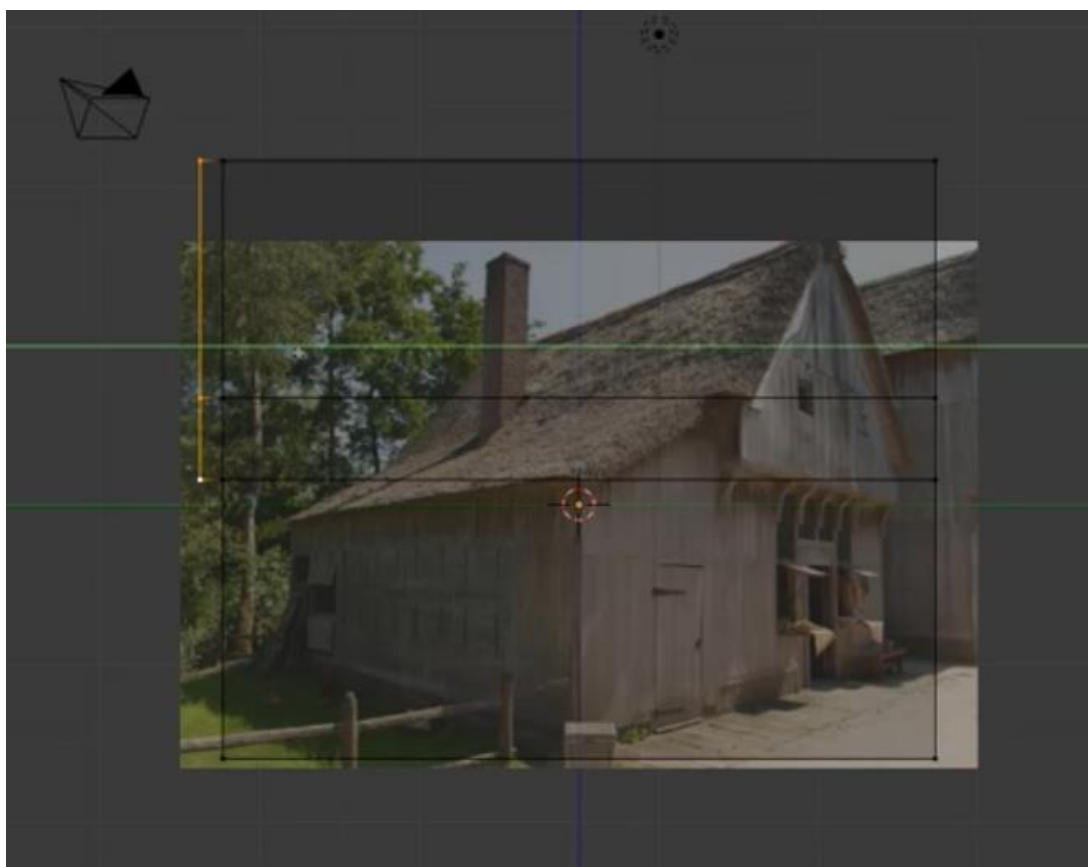
Use scaling to scale the roof in the **x** or **y** direction depending on the rotation of your building.



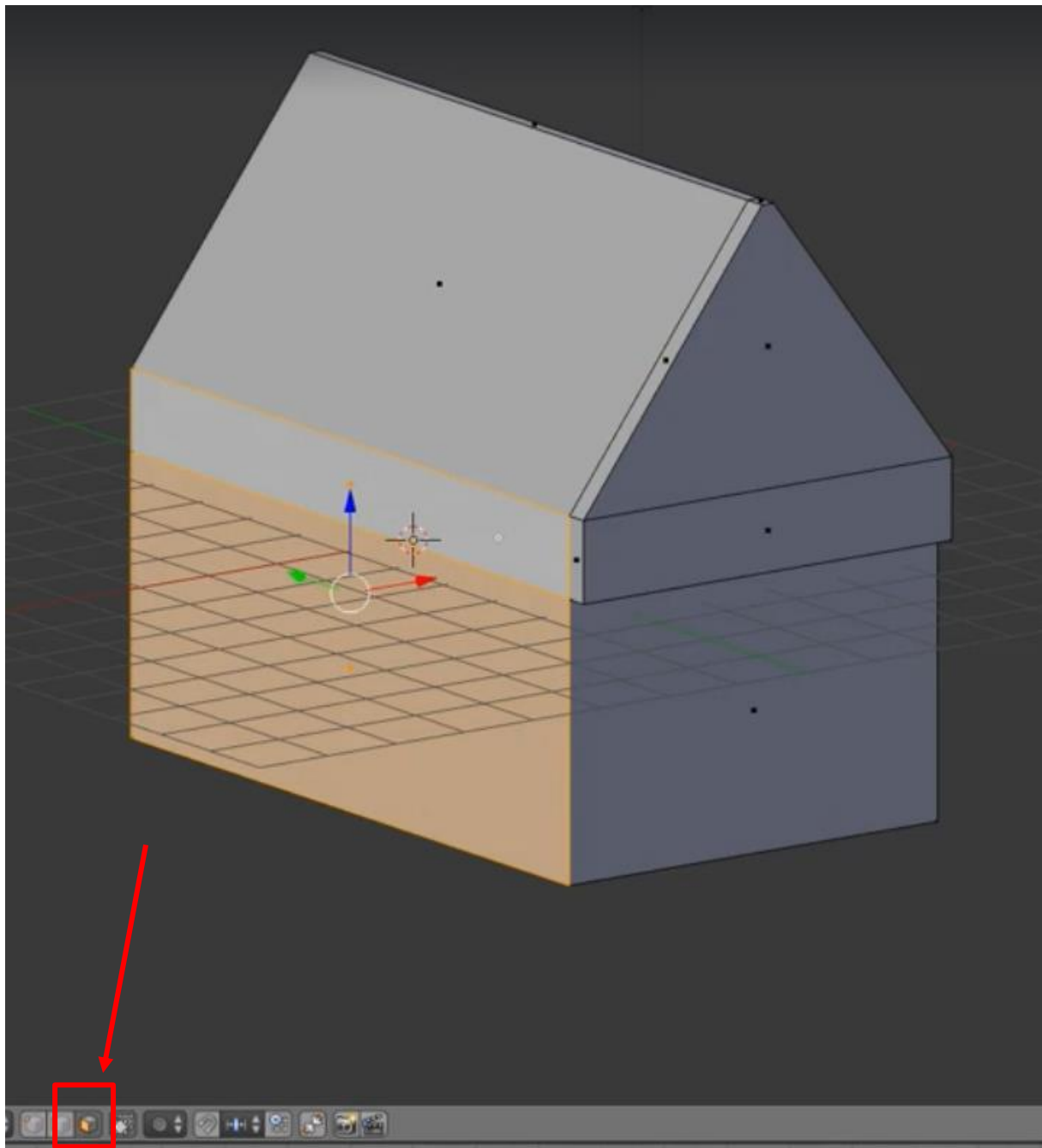
Switch to side view with numpad **3** and scale the building on the y axis.



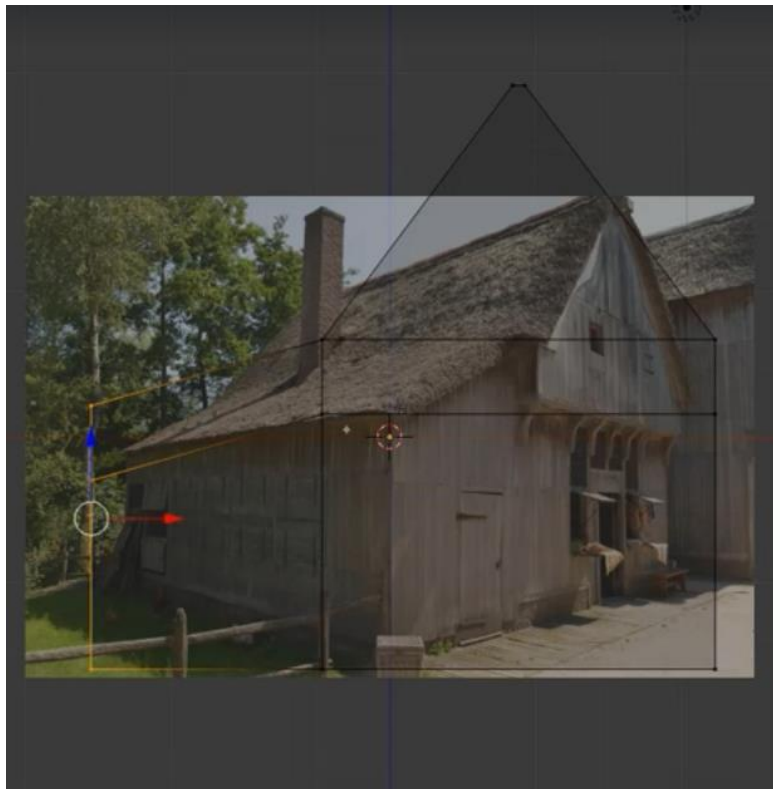
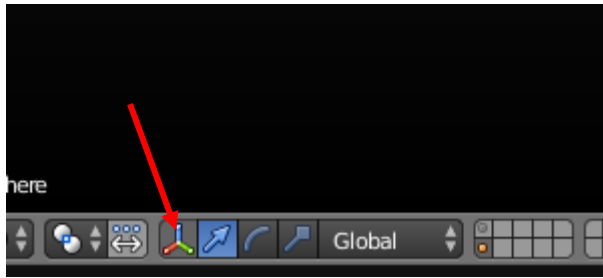
To extrude the upper floor, select the front wall from the lowest point of the roof to the highest and hit **E** to extrude. If the controls of the extrusion are too sensitive, **hold shift** to lower it temporarily.



Another way to extrude is to go to face select mode this is done inside edit mode by using **ctrl + tab** or the face select button in the bar below the viewport. **Hold middle mouse** to rotate the view and select the side of the building. Now hit **E** to extrude it. This is basically the same thing, but you select faces to extrude instead of vertices. Beware of the **ctrl + tab** hotkey, in edit mode it brings up the mesh select mode menu but in object mode it brings you into weight paint mode, if this happens your object turns blue. Just hit **ctrl + tab** again to get back to object mode.

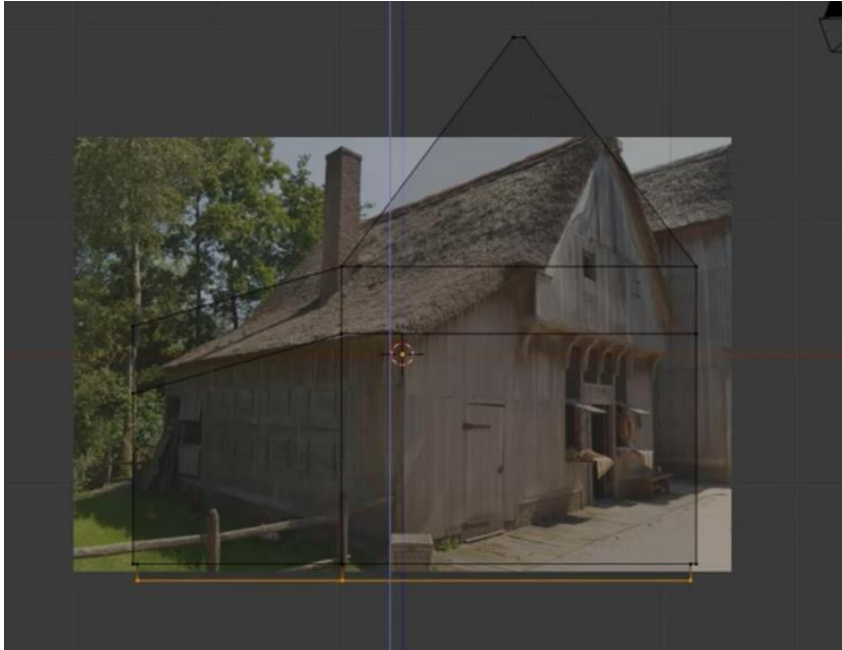


Adjust the shape of the newly extruded part of the building with scaling(**S**) and moving(**G**). If you prefer to use the hotkeys and find the manipulator to be in your way when you select, hit **ctrl + space** to toggle it on/off. It can also be toggled in the bar at the bottom of the 3d viewport.



To extrude a base for the building, select the bottom vertices and hit **E** to extrude, followed by **S** for scaling, then **E** to extrude in the z direction again to make the base.

Another way to do this is by selecting the bottom and hitting **I** for inset followed by **E** to extrude. Inset is a very useful tool that you should get familiar with.



If you get stuck don't forget to ask your question in the Q&A section of this course.